

California University of Pennsylvania
University Course Syllabus
Department of Health Sciences
UCC Approval date: 10/16/2017

A. Protocol

Course Name: Pharmacology
Course Number: ATE 744
Credits: 2
Prerequisites: Enrollment in the PMSAT Program
Maximum Class Size (face-to-face): 30
Maximum Class Size (online): 30

B. Objectives of the Course:

Upon completion of the course, students should be able to:

- 1) Define and discuss the pharmacokinetic and pharmacodynamic principles as they relate to a drug's effect on the body.
- 2) Explain the federal, state, and local laws, regulations and procedures for the proper storage, disposal, transportation, dispensing (administering where appropriate), and documentation associated with commonly used prescription and nonprescription medications.
- 3) Identify and use appropriate pharmaceutical terminology for management of medications, inventory control, and reporting of pharmacological agents commonly used in an athletic training facility.
- 4) Use an electronic drug resource to locate and identify indications, contraindications, precautions, and adverse reactions for common prescription and nonprescription medications.
- 5) Explain the concepts related to bioavailability, half-life, and bioequivalence (including the relationship between generic and brand name drugs) and their relevance to the patient, the choice of medication, and the dosing schedule.
- 6) Explain the pharmacodynamic principles of receptor theory, dose-response relationship, placebo effect, potency and drug interactions as they relate to the mechanism of drug action and therapeutic effectiveness.
- 7) Describe the common routes used to administer medications and their advantages and disadvantages.
- 8) Properly assist and/or instruct the patient in the proper use, cleaning, and storage of drugs commonly delivered by metered dose inhalers, nebulizers, insulin pumps, or other parenteral routes as prescribed by the physician.
- 9) Describe how common pharmacological agents influence pain and healing and their influence on various therapeutic interventions.
- 10) Explain the drug categories used for treatment, desired treatment outcomes, and typical duration of treatment, for the following common diseases and conditions: asthma, diabetes, hypertension, infections, depression, GERD, allergies, pain, inflammation, and the common cold.
- 11) Optimize therapeutic outcomes by communicating with patients and/or appropriate healthcare professionals regarding compliance issues, drug interactions, adverse drug reactions, and sub-optimal therapy.

A. Catalog Description:

This course provides an overview of the management and administration of over the counter and prescription drugs. This course also looks at the pharmacokinetics and pharmacodynamics of drugs, performance enhancing substances, and drugs affecting the musculoskeletal, cardiovascular, nervous, endocrine, and gastrointestinal systems.

B. Outline of the Course:

Introduction to Pharmacology
Pharmacokinetics
Pharmacodynamics
Managing medications in AT
Drugs for Treating Infections

Drugs for Treating Inflammation
Drugs for Treating Pain
Opioids and Addiction
Drugs for Relaxing Skeletal Muscle Drugs for Treating Asthma
Drugs for Treating Colds & Allergies
Drugs for Treating GI Disorders and Hypertension/Heart Disease
Drugs for treating Psychiatric Disorders
Drugs for treating Diabetes
Herbal & Fitness Supplements
Performance-Enhancing Drugs
Drug Testing in Sports

C. Teaching Methodology:

- 1) Traditional Classroom Methodology
Lecture, guest speakers, class discussion, group activities
- 2) Online Methodology
Presentations, readings, discussions, videos

D. Text

Houglum, J. E., Harrelson, G., & Seedfeldt, T. (2016). Principles of Pharmacology for Athletic Trainers. 3rd edition. SLACK Incorporated.

E. Assessment Activities:

- 1) Traditional Classroom Assessment
Exams, quizzes, homework assignments, online discussion posts
- 2) Online Assessment
Exams, quizzes, homework assignments, online discussion posts

F. Accommodations for Students with Disabilities:

OSD

Revised June 2015

STUDENTS WITH DISABILITIES

Students reserve the right to decide when to self-identify and when to request accommodations. Students requesting approval for reasonable accommodations should contact the Office for Students with Disabilities (OSD). Students are expected to adhere to OSD procedures for self-identifying, providing documentation and requesting accommodations in a timely manner.

Students will present the OSD Accommodation Approval Notice to faculty when requesting accommodations that involve the faculty.

Contact Information:

- Location: Carter Hall - G-35
- Phone: (724) 938-5781
- Fax: (724) 938-4599
- Email: osdmail@calu.edu
- Web Site: <http://www.calu.edu/osd>

G. Title IX Syllabus Addendum

California University of Pennsylvania
Reporting Obligations of Faculty Members under Title IX
of the Education Amendments of 1972, 20 U.S.C. §1681, et seq.

California University of Pennsylvania and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment and to comply with the Title IX of the Education Amendments of 1972 and guidance from the Office of Civil Rights, the University requires faculty members to report incidents of sexual violence shared by students to the University's Title IX Coordinator, Dr. John A. Burnett, Special Assistant to the President for EEO, Office of Social Equity, South Hall 112, Burnett@calu.edu, 724-938-4014. The only exceptions to the faculty member's reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project. Faculty members are obligated to report sexual violence or any other abuse of a student who was, or is, a child (person under 18 years of age) when the abuse allegedly occurred to the person designated in the University protection of minors policy.

The University's information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at:

- **Office of Social Equity**, South Hall 112, 724-938-4014
 - Social Equity Home Page www.calu.edu/SocialEquity
 - Social Equity Policies www.calu.edu/SEpolicies
 - Social Equity Complaint Form www.calu.edu/SEcomplaint
- **Counseling Center**, Carter Hall G53, 724-938-4056
- **End Violence Center**, Carter Hall G94, 724-938-5707
- **Student Affairs**, Natali Student Center 311, 724-938-4439
- **Wellness Center**, Carter Hall G53, 724-938-4232
- **Women's Center**, Natali Student Center 117, 724-938-5857
- **Threat Response Assessment and Intervention Team (T.R.A.I.T.) & Dept. of Public Safety & University Police**, Pollock Maintenance Building, 724-938-4299
 - **EMERGENCY:** From any on-campus phone & Dial **H-E-L-P** or go to any public pay phone & **Dial *1**. (*Identify the situation as an emergency and an officer will be dispatched immediately.)

H. Supportive Instructional Materials, e.g. library materials, web sites, etc.

NATA Position/Consensus Statements: <http://www.nata.org/news-publications/pressroom/statements>
Professional journal articles: Journal of Athletic Training, Athletic Therapy Today, American Family Physician, Journal of Bone & Joint Surgery, International Journal of Emergency Medicine, Cochrane Database Systematic Reviews, etc.

Additional Information for Course Proposals

I. Proposed Instructors:

Any qualified athletic training faculty.

J. Rationale for the Course:

This course will contain required athletic training educational competencies as per accreditation standards.

K. Specialized Equipment or Supplies Needed:

none

L. Answer the following questions using complete sentences:

1) Does the course require additional human resources? (Please explain)

No

If Yes, click here to answer Question N1, above.

- 2) Does the course require additional physical resources? (Please explain)

No

If Yes, click here to answer Question N2, above.

- 3) Does the course change the requirements in any particular major? (Please explain)

Yes

This course is a part of the new/revised major, the professional master of science in athletic training.

- 4) Does the course replace an existing course in your program? (If so, list the course)

No

If Yes, click here to answer Question N4, above.

- 5) How often will the course be taught?

Each Fall

Click here to add text to qualify your selection for course timing, if necessary.

- 6) Does the course duplicate an existing course in another Department or College? (If the possibility exists, indicate course discipline, number, and name)

No

Click here if the answer to Question N6, above is YES. Indicate the other discipline/department and the other course number and name.

- M. If the proposed course includes substantial material that is traditionally taught in another discipline, you must request a statement of support from the department chair that houses that discipline.

NA

- N. Please identify if you are proposing to have this course considered as a menu course for General Education. The General Education Committee must consider and approve the course proposal before consideration by the UCC.

No

O. Approval Form

Provide the Approval Form (Signature Page) with the signatures of your department Chair AND college Dean (electronically).